



DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT SECRETARY OF THE ARMY
ACQUISITION LOGISTICS AND TECHNOLOGY
103 ARMY PENTAGON
WASHINGTON DC 20310-0103



09 DEC 2002

REPLY TO
ATTENTION OF

Dr. Joe Braddock
Chair, Army Science Board
2511 Jefferson Davis Highway, Suite 11500
Arlington, Virginia 22202

Dear Dr. Braddock:

I request the Army Science Board (ASB) conduct a study to examine "Force Protection Technologies for the 2010-2020 Timeframe." The study should address, but is not limited to, the Terms of Reference (TOR) described below. The ASB members and consultants appointed to this study should consider the TOR as guidelines and may expand the study to issues considered important to the study. Modifications to the TOR must be addressed with you.

Background: The increased likelihood of non-conventional threat action against U.S. Forces provides cause for focusing and improving Army capabilities for Force Protection, to include operations, intelligence, training, consequence management, related science, technology, and modernization. These apply to both Joint and Army capabilities based in and employed outside the United States. Therefore, advanced technologies for protection against non-conventional threats to our forces, bases, and their infrastructure in CONUS and OCONUS environments are required.

TOR:

a. Review prior force protection studies. Sources for these studies include Army, Department of Defense, other organizations that conduct national security studies, and, potentially, NATO allies and Israel. This review should be combined with a current assessment of threats and vulnerabilities and any useful projections. Form a threat/vulnerability continuum and net assessments of the current assessed threats versus current capabilities and assess intelligence requirements to support the force protection mission against non-conventional threats.

b. The study should address potential force protection issues during and after OCONUS deployment. Force protection shall include deterrence, defense and consequence management. Consider mission and operational scenarios to include: Peacekeeping, peace enforcement, humanitarian missions, support to tactical operations, and other similar missions in which the Army may engage into the foreseeable future. Special consideration should be given to the challenges of force protection in an urban environment. The study should treat

the above in the context of needed joint capabilities, operations, and training for the Total Army.

c. The study should address advanced technologies for the 2010-2020 timeframe to support the various previously defined force protection missions. This should be contrasted with a baseline of available and near-term technology. Among the topics to be addressed should be: Command, Control, and Information; Robotics and Automation; Sensors; Physical Protection Systems; and Lethal/Non-lethal Systems.

d. Use analysis and models to evaluate potential contributions of force protection technologies in specific operational contexts where appropriate. Investigate necessary simulation and modeling capabilities needed to support analysis of force protection options. Use these and other models to assess the impact of force protection technologies on the total cost of force protection, with respect to potential reductions in manpower requirements, versus current manpower-intensive methods.

e. Address problems and opportunities associated with international operations, including commercial, governmental and non-governmental, and infrastructure environments in which the Army must operate and accomplish force protection.

Study Sponsorship: I will be the primary sponsor. I recommend you contact the following organizations and request their additional sponsorship: The United States Army Training and Doctrine Command, the United States Army Materiel Command, Office of the Chief of Army Reserves, Director, Army National Guard, the Army G-2, the Army G-3, and the Army G-4.

Study Duration: Please initiate the study in December 2002, provide interim progress reports in February and May 2003, and report out during July 2003.

Sincerely,


Claude M. Bolton, Jr.

Assistant Secretary of the Army
(Acquisition, Logistics and Technology)